

MULTI-TAP CAMERA

ABSTRACT OF THE INVENTION

5       A camera comprises a multitap imager, separate digitizing channels for each imager tap, adjustments for channel gain and black level, a pattern generator, and a channel balancer. The channel balancer compares adjacent pixels and sums the differences in levels over many frames.

10      Any accumulated difference is used as a feedback signal to drive the summing to a minimum. If the imager is temporarily hooded, the feedback is used to balance black levels between the channels. If the imager is operating, the feedback is used to dynamically adjust the channel gain

15      of one channel to match the other. A pattern generator is used once during calibration to generate a test pattern in the digitizing channels that makes it obvious to a framegrabber how exactly to restitching the various lanes or zones of the whole image frame back together.

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